Bruhath Bengaluru Mahanagara Palike

QUALITY ASSURANCE/QUALITY CONTROL REPORT

Office of the Chief Engineer (Quality Assurance/Control) Annexure-05,
BBMP Head Office, Hudson circle Bengalore-001,
Ph.no:08022975541, E-mail ID:qualitycontrol.bbmp@gmail.com

QUALITY ASSURANCE REPORT/QUALITY CONTROL REPORT

CE/QA/PR/455 /2022-23, DATE: 28/4/23		
Name of Work	:	Package No 06 (Consist of 14 works) Estimated cost 1500.00 Lakhs
Job Code	:	009-23-000003
Bill No. & Amount	:	**2nd & Part Bill.Rs. 1,93,11,441.00(Including GST)**
Name of Agency	:	**Sri. M/s. SMLP Asphalts Prop. Sri B B Umesha**
Type of Test Performed	:	Rebound Hammer test as per IS13311-(2)-1992
Materials on which Tests Was Performed	:	1. RCC Drain wall (M20) 2. Precast cover slab (M20)
Officers present during inspection	:	1. Smt. Archana AE – Ward No.09 2. Sri C. Shridhar. AEE-Quality Assurance
Project Management Consultants	:	Mecadez Core Technologies Pvt Ltd, Bangalore
Observations	:	➢ NDT (Rebound hammer test) was conducted by Project Management Consultants representative at random locations in presence of AE (Ward No.09) along AEE QA division. ➢ The Rebound Hammer Test was conducted randomly on RCC Drain wall (M20), Pre cast cover slab (M20) & Kerb Stone (M20). The readings and results are recorded by the PMC consultants. ➢ The readings of Rebound Hammer Test results are tabulated and analysis of test results done by PMC is here by furnished. ➢ The location wise test results are reproduced in the tables shown below.
Test Locations	:	Location 1:7th Cross Road 4th Block HMT Layout (opp to Vacant site #792) Location 2: 6th Main Road 3rd Block BEL Layout (opp to Vacant site #717) Location 3: 5th Main Road 3rd Block BEL Layout (opp to Vacant site #671)

28/4/23

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28/04/2023

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ಉಪ-ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

Table-1: Rebound Hammer Test Results for Location-1

Sl. No.	Landmark	Description	Rebound Reading	Average Reading	Compressive Strength (N/mm²)	Impact Direction
Sample Tested Location at 7th Cross Road 4th Block HMT Layout						
1	opp to Vacant site #792	RCC Drain Wall (M20).	28	31	24-26	Horizontal
2			30			
3			30			
4			32			
5			30			
6			34			
1		Precast cover slab (M20)	30	28	24-26	Vertical Down
2			28			
3			30			
4			28			
5			28			
6			26			

Table-2: Rebound Hammer Test Results for Location-2

Sl. No.	Landmark	Description	Rebound Reading	Average Reading	Compressive Strength (N/mm²)	Impact Direction
Sample Tested Location at 6th Main Road 3rd Block BEL Layout						
1	opp to Vacant site #717	RCC Drain Wall (M20).	30	31	24-26	Horizontal
2			30			
3			30			
4			32			
5			32			
6			34			
1		Precast cover slab (M20)	26	25	20-22	Vertical Down
2			27			
3			26			
4			24			
5			24			
6			24			

Table-3: Rebound Hammer Test Results for Location-3

Sl. No.	Landmark	Description	Rebound Reading	Average Reading	Compressive Strength (N/mm²)	Impact Direction
Sample Tested Location at 5th Main Road 3rd Block BEL Layout						
1	opp to Vacant site #671	RCC Drain Wall (M20).	30	31	24-26	Horizontal
2			28			
3			30			
4			32			
5			32			
6			34			
1		Precast cover slab (M20)	24	25	20-22	Vertical Down
2			24			
3			26			
4			26			
5			26			
6			24			

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ಉಪ-ವಿಭಾಗ ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

onclusion:

The file containing **2nd & part bill** has been submitted for the above work to QA department on 18.04.2023 requesting for spot inspection. Engineers of QA/QC division have visited the work spot on 24.04.2023

During the inspection, it was understood that the items found in the bill, have been executed by the contractor from the documents provided by PMC team and from the file submitted.

PMC team was instructed to assess the strength of concrete used RCC Drain wall (M20), Precast cover slab (M20) by Rebound Hammer Test. The Rebound hammer test were conducted by PMC in presence of engineer in charge of work.

From the test results furnished by PMC consultants, it is concluded that the results of the samples collected are in accordance with the standards/ specifications mention in the IRC codes. However, the results submitted by the PMC have been reproduced here with for further needful action. The results checked by QA/QC relates only for item tested in the particular location randomly.

Further, QA/QC directs the PMC and Engineer in-charge of the work that all materials used for the work shall be inspected, tested and accepted as per the relevant specifications before incorporation in the work. The frequencies and methods of sampling and testing materials, including those required for definite purpose and not covered by MORT&H specifications shall be in accordance to the relevant IRC or BIS or AASHTO/ASTM/BS standards in order of priority.

All materials or work not conforming to the requirements of the specifications shall be considered unacceptable and rejected. The unacceptable materials or works that are rejected shall be immediately removed unless the defects are corrected and approved by the engineer in-charge of work.

The concerned Engineer in charge of the work shall follow the direction issued by Chief Commissioner Letter number dated 01.08.2022 and 14.09.2022 and take necessary action as appropriate in accordance with the law.

Note: -

This report by QA/QC is pertaining to the work carried out in **2nd. & part bill** only. Therefore, further QA/QC reports shall be obtained for the items of work carried out in future Running Account bill / Final bill.

Safety precautions shall be taken at work spot to prevent any mishap, injuries or loss of life to general public and construction workers according to guidelines laid down in code of practices.

Engineer in charge of work shall obtain requisite approval and Implement traffic management plan prior to commencement of work.

Engineer in charge of work shall display details of work, work code, cost of project, start and completion date, and information of Engineer in charge of work with contact numbers at work spot.

Engineer in charge of work and Agency shall ensure that if any damages or defects occur pertaining to the executed work within the Defect Liability period (DLP), The same shall be rectified immediately on top priority without fail.

24/4/23
ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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24/4/23
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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24/04/23
ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರರು
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24/04/2023
ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ

Location 1:7th Cross Road 4th Block HMT Layout (opp to Vacant site #792)

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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Location 2: 6th Main Road 3rd Block BEL Layout (opp to Vacant site #717)

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಗುಣಮಟ್ಟ ಪರಿವೀಕ್ಷಣೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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ಗುಣಮಟ್ಟ ಪರಿವೀಕ್ಷಣೆ/ಗುಣನಿಯಂತ್ರಣ

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಗುಣಮಟ್ಟ ಪರಿವೀಕ್ಷಣೆ/ಗುಣನಿಯಂತ್ರಣ

Location 3: 5th Main Road 3rd Block BEL Layout (opp to Vacant site #671)

28/4/23

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
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ತಾಂತ್ರಿಕ ಅಧಿಕಾರಿಗಳು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ